

Surge Test Generator PG 24 - 2500

Surge voltage:
1.2/50 μ s, 0.5- 24 kV

Surge current:
8/20 μ s, 0.2 - 12 kA

acc. to:
IEC 61000-4-5, IEEE 587



With test cover PA504 (= option)

The Surge Test Generator PG 24-2500 is a combined impulse current-/impulse-voltage generator which, for high-impedance loads, $R_L > 100\Omega$, delivers a standard impulse voltage with waveform 1.2/50 μ s and, for short-circuited output, a standard impulse current with waveform 8/20 μ s, as defined by IEC 60. The peak value of the pulse output voltage can be adjusted from 0.5 kV to 24 kV. The peak short circuit current amplitude is 12 kA.

The generator is designed for dielectric testing of components and systems or direct coupling to cable shields and shielding enclosures. PG 24-2500 consists of a microprocessor controlled control- and monitoring unit and a high-voltage unit, which contains the energy storage capacitor, the high-voltage switch and the pulse forming network.

PG 24-2k5 features a microprocessor controlled user interface and a 5" touch screen unit for ease of use. The microprocessor allows the user to execute either standard test routines or a "user defined" test sequence. The test parameters, which are shown on the built in display, are easily adjusted by means of touch screen.

A standard USB port provides the ability to print a summary of the test parameters to a USB stick.

Moreover, all generator functions may be computer controlled.

The software program PG-REMOTE allows full remote control of the test generator via fiber optic Ethernet interface as well as documentation and evaluation of test results, accordingly to the IEC 17025. To record definite impulses, it is equipped with an Impulse Recording Function (IRF).

Technical specification:	PG 24-2500
Mainframe, control unit:	
Microprocessor controlled touch panel	5", 800X480, 24 bit
Optical Ethernet Interface for remote control of the generator	optional
Interface for saving reports	USB
External Trigger input	10 V an 1 k Ω
Connector for external safety interlock loop	24 V =
and external red and green warning lamps acc. to VDE 0104	230 V, 60W
Mains power supply	230 V , 50/60 Hz
Dimensions: 19"-cabinet, W * H * D	556*620*600 mm ³
Weight	115 kg
HV-impulse generator:	
Peak value of the open-circuit output voltage	0.5 - 24 kV \pm 10 %
Wave form acc. to IEC 60, VDE 0433	1.2 / 50 μ s \pm 30 %/ \pm 20 %
Peak value of the short-circuit output current	0.2 - 12 kA \pm 10 %
Wave form acc. to IEC 60, VDE 0433	8 / 20 μ s \pm 20 %
Polarity of surge output voltage / output current	pos/neg/alt selectable
max. stored energy	2500 Joule
Charging time at max. charging voltage	< 40s
HV-output: High current terminals on the rear panel	HV-OUT
Mains synchronous triggering: Phase shifting, digitally selectable	0 - 360 $^{\circ}$, step 1 $^{\circ}$
Display of peak values of impulse voltage and impulse current	build in
Monitor output for impulse voltage	2000 : 1 \pm 5 %
Monitor output for impulse current	12V \equiv 12 kA \pm 5 %
Ground rod, for manual security earthing of the HV output	build in
Option:	
Software PG-TEST for remote control 5 m fibre-optic cable and PC-interface	
Option :	
Safety test cover PA 504 mounted on the top Limit switch connected to the safety interlock loop	
Test space: W*H*D	400*200*400 mm